

What is claimed is:

- 1 1. A method for operating a mobile unit, comprising the steps of:
2 determining a future location coordinate of a mobile unit; and
3 selecting a protocol, for use by the mobile unit, based on the future location coordinate.

- 1 2. The method of claim 1, further comprising the steps of:
2 receiving signals representing a location and corresponding time coordinate of the mobile
3 unit;
4 determining a path of motion of the mobile unit based on the received signals; and
5 determining the future location coordinate based on the path of motion.

- 1 3. The method of claim 2, further comprising the steps of:
2 receiving signals representing a plurality of location and corresponding time coordinates of
3 the mobile unit; and
4 determining the path of motion by calculating a direction of the mobile unit based on the
5 plurality of location and time coordinates.

- 1 4. The method of claim 2, further comprising the steps of:
2 storing previous location and time coordinates of the mobile unit in a historical database;
3 obtaining a coordinate representing at least one of a current time and a current location of the
4 mobile unit; and
5 performing a lookup in the historical database based on the obtained coordinate to determine
6 an expected path of motion for the mobile unit.

- 1 5. The method of claim 2, further comprising the steps of:
2 maintaining a protocol database associating a protocol with at least one region;
3 obtaining a coordinate representing a current location of the mobile unit;
4 determining a present region in the protocol database based on the current location of the
5 mobile unit; and
6 determining the future location coordinate as a boundary of the present region in the protocol
7 database that intersects the path of motion, wherein the boundary separates the present region from
8 an adjacent region.

- 1 6. The method of claim 5, wherein the selecting step further comprises the step of:
2 selecting the protocol associated with the adjacent region in the protocol database.
- 1 7. The method of claim 6, further comprising the step of:
2 revising the protocol database based on service of quality data corresponding to the mobile
3 unit.
- 1 8. The method of claim 6, further comprising the step of:
2 revising the protocol database based on detected changes in environmental conditions.
- 1 9. The method of claim 1, further comprising the step of:
2 initiating operations according to the selected protocol while substantially operating using a
3 present protocol.
- 1 10. The method of claim 1, further comprising the steps of:
2 operating an application in the mobile unit to process data according to a present protocol;
3 and
4 altering operations of the application to process data according to the selected protocol at a
5 time substantially contemporaneous with the mobile unit's arrival at a location corresponding to the
6 future location coordinate.
- 1 11. The method of claim 10, further comprising the step of:
2 operating the application to conduct a data session, wherein the data session is maintained
3 while the operations of the application are altered.
- 1 12. The method of claim 9, wherein the present and selected protocols each correspond to a
2 different communication network selected from the group consisting of at least: a wireless local area
3 network (Wavelan) and a cellular network.

- 1 13. A mobile unit operable to:
2 determine a future location coordinate of the mobile unit; and
3 select a protocol, for use by the mobile unit, based on the future location.
- 1 14. The mobile unit of claim 13, further operable to:
2 receive signals representing a plurality of location and corresponding time coordinates;
3 determine a path of motion, wherein the path of motion includes a present location and a
4 direction calculated based on the plurality of location and corresponding time coordinates; and
5 determine the future location coordinate based on the path of motion.
- 1 15. The mobile unit of claim 14, further operable to:
2 perform a lookup in a protocol database based on the path of motion, wherein the protocol
3 database associates a protocol with each of at least one region;
4 determining a present region based on the performed lookup;
5 and selecting the protocol associated with the present region in the protocol database.
- 1 16. The mobile unit of claim 13, further operable to:
2 initiate operations according to the selected protocol while substantially operating using a
3 present protocol.
- 1 17. The mobile unit of claim 13, further operable to:
2 operate an application to process data according to a present protocol; and
3 alter operations of the application to process data according to the selected protocol at a time
4 substantially contemporaneous with an arrival at a location corresponding to the future location.
- 1 18. A base station operable to:
2 maintain a protocol database associating a protocol with each of at least one region;
3 obtain a path of motion for a mobile unit, wherein the path of motion includes a current
4 location and a direction of the mobile unit;
5 determine a present region in the protocol database based on the current location of the
6 mobile unit; and

7 determine a future location coordinate of the mobile unit as a boundary of the present region
8 in the protocol database that intersects the path of motion, wherein the boundary separates the
9 present region from an adjacent region.

1 19. The base station of claim 18, further operable to:
2 receive signals representing the path of motion of the mobile unit.

1 20. The base station of claim 18, further operable to:
2 receive signals representing a plurality of location and corresponding time coordinates of the
3 mobile unit;
4 store the received location and corresponding time coordinates in a historical database;
5 obtain a coordinate representing at least one of a current time and a current location of the
6 mobile unit; and
7 perform a lookup of the historical database based on the obtained coordinate to determine an
8 expected path of motion for the mobile unit.

1 21. The base station of claim 18, further operable to:
2 receive signals from a mobile unit representing service quality data relating to the mobile
3 unit's current location; and
4 update the protocol database based on the service quality data.

1 22. The base station of claim 21, further operable to:
2 update boundaries of the at least one region in the protocol database based on the service
3 quality data.

1 23. A mobile unit comprising:
2 means for determining a future location coordinate of the mobile unit; and
3 means for selecting a protocol, for use by the mobile unit, based on the future location.

1 24. A base station comprising:
2 means for maintaining a protocol database associating a protocol with each of at least one
3 region;
4 means for obtaining a path of motion for a mobile unit, wherein the path of motion includes a
5 current location and a direction of the mobile unit;
6 means for determining a present region in the protocol database based on the current location
7 of the mobile unit; and
8 means for determining a future location coordinate of the mobile unit as a boundary of the
9 present region in the protocol database that intersects the path of motion, wherein the boundary
10 separates the present region from an adjacent region.